

**Remarks/Arguments:**

This amendment is being submitted in response to the Office Action dated August 20, 2004. Applicants respectfully request reconsideration and allowance of claims 1-13 in light of remarks made herein.

**Figure 3A**

At the request of the Office, Applicant has provided herewith a substitute drawing sheet containing Figure 3A. The substitute drawing sheet contains no new matter.

**Rejection of Claims 1-7 Under 35 U.S.C. §102(e)**

The Office action rejects claims 1-7 under 35 U.S.C. §102(e), as being anticipated by U.S. Patent No. 6,711,316 ("Ducellier"). Applicant respectfully disagrees with the conclusion of anticipation.

35 U.S.C. §102(e) states:

"A person shall be entitled to a patent unless ...  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

According to M.P.E.P. §2131:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants respectfully submit that Ducellier does not disclose all of the elements of independent claim 1. Specifically, Ducellier does not disclose "a plurality of white cells" nor "a

micromirror array configured to receive the plurality of component light beams from the plurality of white cells.” Further, Ducellier does not disclose “the micromirror array further configured to reflect the plurality of component light beams among the plurality of white cells.” Accordingly, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. 102(e) and allow independent claim 1.

Claim 1 of the present application reads:

“An apparatus for optically correlating signals, comprising:  
an input light source, the input light source adapted to generate at least one individual light beam from at least one direction;  
a first plurality of optical elements configured to split the at least one individual light beam into a plurality of component light beams, the plurality of optical elements further configured to direct the plurality of component light beams along a plurality of paths;  
a plurality of white cells, each white cell configured to receive at least one component light beam, each white cell further configured to propagate light at a specific duration;  
a micromirror array configured to receive the plurality of component light beams from the plurality of white cells, the micromirror array further configured to reflect the plurality of component light beams among the plurality of white cells;  
a second plurality of optical elements configured to receive each of the component light beams and combine the plurality of component light beams to form an output light beam.” (emphasis added)

Regarding claim 1, the Office asserts that Ducellier teaches the use of a plurality of white cells to receive at least one component light beam. Although the Office specifically cites a spherical mirror (330) in support of this assertion, the spherical mirror (330) is fundamentally different than a white cell as it is disclosed in the present application and understood by those of ordinary skill in the art. In fact, Ducellier makes no disclosure of a white cell anywhere in the cited document. Accordingly, the Office has failed to meet its burden of showing that Ducellier discloses a plurality of white cells, and further fails to show that the spherical mirror (330) is a plurality of white cells.

The Office further asserts that Ducellier teaches “a micromirror array configured to receive a plurality of component light beams from the plurality of white cells.” The Office cites

micromirror array (352) to support this assertion. Micromirror array (352), however, receives light beams ( $\lambda 1 - \lambda M$ ) from a spherical mirror (330), not from a plurality of white cells as claimed by the present application. Further, micromirror array (352) fails to reflect the light beams among a plurality of white cells, as claimed by the present application. The micromirror array (352) cited by the Office merely acts as a cross-connect between two spherical mirrors (330 and 370).

Ducellier fails to disclose several claimed aspects of the present invention, including the plurality of white cells and the appropriately configured micromirror array. Thus, Applicant respectfully submits that Ducellier does not anticipate claim 1 as currently drafted. Further, Applicant contends that claims 2-7 are patentable for the same reasons as claim 1. Accordingly, Applicant respectfully requests the Office withdraw the rejection of claims 1-7 in view of Ducellier.

#### New Claims 8-13

Applicant has presented new claims 8-13 which Applicant believes to be patentable in view of the cited art. Applicant respectfully requests the Office review and allow claims 8-13.

#### Conclusion

Entry of this response and allowance of claims 1-13 are respectfully requested. If the Examiner believes that an interview would serve to advance this case, Applicants respectfully invite the Examiner to contact Applicants' representative at the telephone number listed below to discuss the present application.

Respectfully submitted,

February 22, 2005

Date



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